

### **REMARKS**

Claims 1-52 are currently pending in the application. Claims 9 and 10 have been amended, and new claims 53-56 have been added. No new matter has been added by way of this amendment. Support for the recitation of  $\alpha$ 1-antitrypsin in claims 9-10, 53 and 55 can be found in the specification in [0183]. Support for the recitation of “emphysema” in new claim 54 can be found in the specification, *e.g.*, at [0077] and [0181]. Support for new claims 55 and 56 can be found in original claims 2 and 18. Following entry of this amendment, claims 1-56 will be pending in the application.

Applicants are submitting herewith a Revocation, Power of Attorney, and Statement Under 37 C.F.R. 3.73(b).

In the Office Action mailed June 13, 2005, the Examiner has requested that Applicants make a number of species elections. Each of these elections is discussed separately below.

#### **A. Ligand Species**

The Examiner has requested that Applicants select a ligand species from those recited in claim 2:

pIgR, pIgR stalk, transferrin receptor, apo-transferrin, holo-transferrin, vitamin B12 receptor, FcRn, an integrin, Flt-1, Flk-1, Flt-4, a GPI-linked protein, a scavenger receptor, folate receptor, and low density lipoprotein receptor.

Applicants provisionally elect pIgR as the ligand species election with traverse. Applicants respectfully submit that the “pIgR stalk” ligand species is encompassed by the “pIgR” ligand species. Thus, there is no additional burden placed on the Examiner in conducting this search. Accordingly, Applicants respectfully submit that these ligand species should be examined together. Claims 1-56 read upon this provisionally elected species.

#### **B. Therapeutic Agent Species**

The Examiner has requested that Applicants select a therapeutic agent species from the following group:

polypeptide, nucleic acid, anti-tumor agent, anti-infective agent, anti-angiogenesis agent, apoptosis inducer, immune system modulator, enzyme, interleukin, interferon, cytokine, chemokine, TNF, taxol, an antibody IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-9, IL-12, IL-13, IL-15, interferon  $\alpha$ , interferon  $\beta$ , interferon- $\gamma$ , IP-10, I-TAC, and MIG.

Applicants provisionally elect “polypeptide” as the therapeutic agent species election with traverse. Applicants respectfully submit that the anti-tumor agent, anti-infective agent, anti-angiogenesis agent, apoptosis inducer, immune system modulator, enzyme, interleukin, interferon, cytokine, chemokine, TNF, taxol, an antibody IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-9, IL-12, IL-13, IL-15, interferon  $\alpha$ , interferon  $\beta$ , interferon- $\gamma$ , IP-10, I-TAC, and MIG (as well as newly added  $\alpha$ 1-antitrypsin) therapeutic agent species are encompassed by the “polypeptide” therapeutic agent species. Thus, there is no additional burden placed on the Examiner in conducting this search. Accordingly, Applicants respectfully submit that all of these therapeutic agent species should be examined together. Claims 1-56 read upon this provisionally elected species.

**C. Targeting Element Species**

The Examiner has requested that Applicants select a targeting element species from the following group:

polypeptide, a recombinant polypeptide, an antibody, an antibody fragment, a single-chain variable region fragment, a small molecule, an oligonucleotide, an oligosaccharide, a polysaccharide, a carbohydrate, a cyclic polypeptide, a peptidomimetic, and an aptamer.

Applicants provisionally elect “antibody” as the targeting element species election with traverse. Applicants respectfully submit that the antibody, antibody fragment, and single-chain variable region fragment species are encompassed by the “antibody” targeting element species. Thus, there is no additional burden placed on the Examiner in conducting this search. Accordingly, Applicants respectfully submit that all of these targeting element species should be examined together. Claims 1-56 read upon this provisionally elected species.

**D. Disease Species**

The Examiner has requested that Applicants select a disease species from the following group:

sarcoma, adenocarcinoma, choriocarcinoma, melanoma, colon adenocarcinoma, breast adenocarcinoma, Ewing's sarcoma, osteosarcoma, renal cell carcinoma, lung cancer, bacterial lung infection, viral lung infection, fungal lung infection, disorder of the interstitium, disorder of gas exchange or blood circulation or airways or pleura, COPD or asthma.

Applicants provisionally elect "disease of the airway" as the disease species election with traverse. Applicants respectfully submit that (at least) COPD, asthma, and emphysema (new claim 54) are encompassed by the "disease of the airway" targeting element species (see, *e.g.*, [0077] and [0182] of the specification). Thus, there is no additional burden placed on the Examiner in conducting this search. Accordingly, Applicants respectfully submit that all of these disease species should be examined together. At least claims 1-18, 35, 37, 38 and 39-56 read upon this provisionally elected species.

**E. pIgR Species**

**1. pIgR Amino Acid Species**

The Examiner has requested that, if Applicants select pIgR as the ligand species (see Section A above), then Applicants must also select an amino acid species selected from SEQ ID NOS:37 - 45.

Applicants elect SEQ ID NO:44 (QDPRLF) as the pIgR amino acid species.

**2. pIgR Region Species**

The Examiner has also requested that, if Applicants select pIgR as the ligand species (see Section A above), then Applicants must also select a pIgR region species selected from the group:

R1, R2a, R2b, R3a, R3b, R3c, R4a, R4b, R4c, R4d, R5a, R5b, R5c, R5d, R5e, R6a, R6b, R6c, R6d, R6e, R6f, R7a, R7b, R7c, R7d, R7e, R7f, R7g, R8a, R8b, R8c, R8d, R8e, R8f, R8g, R8h.

provisionally elect "R8a" (*i.e.*, from LRKED to the carboxy terminus of pIgR) as the pIgR region species election with traverse. Applicants respectfully submit that the each of

the remaining pIgR regions is encompassed by the "R8a" sequence. Thus, there is no additional burden placed on the Examiner in conducting this search. Accordingly, Applicants respectfully submit that all of these targeting element species should be examined together. Claims 1-56 read upon this provisionally elected species.

**F. Conclusion**


A Petition for a one (1) month Extension of Time under 37 C.F.R. § 1.136(a) is filed concurrently herewith, which extends the response period from July 13, 2005 to August 13, 2005. Because August 13, 2005 falls on a Saturday, the response period is extended to Monday, August 15, 2005, pursuant to 37 C.F.R. § 1.7. The Petition further authorizes the PTO to charge the one month extension fee of \$55 to our Deposit Account No. 50-3013, which reflects Applicant's Small Entity Status.

The PTO is further authorized to charge \$100 for the addition of 4 new dependent claims (claims 53-56 at \$25 each) to Deposit Account No. 50-3013, which reflects Applicant's Small Entity Status.

Applicants believe no other fees are due in connection with this Response. However, if there are any other fees due, please charge them to Deposit Account 50-3013. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above or in the Petition filed concurrently herewith, such an extension is requested and the fee should be charged to our Deposit Account. Also, please charge any fees underpaid or credit any fees overpaid to the same Deposit Account.

Respectfully submitted,



  
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Date: August 15, 2005

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